



Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>		Title Of Invention		Block-Level Sampling in Statistics Estimation			
		Application Number		10/814,382			
		Filing Date		03/31/2004			
		First Named Inventor		Das, et. al.			
		Art Unit		2171			
		Examiner Name		N/A			
Sheet	1	of	4	Attorney Docket Number		307517.01	

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	U.S. Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
/KL/	A	US-6278989	08/21/2001	Chaudhuri, et. al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ³
		Kind Code ² Country Code ³ Number ⁴ (if known)				
	B					

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	C	J. Bunge and M. Fitzpatrick. Estimating the Number of Species: A Review. Journal of the American Statistical Association 88(1993): 364-373.	
	D	K.P. Burnham and W.S. Overton. Estimation of the size of a closed population when capture possibilities vary among animals. Biometrika 65(1978): 625-633.	
	E	K.P. Burnham and W.S. Overton. Robust estimation of population size when capture possibilities vary among animals. Ecology 60(1979): 927-936.	

Examiner Signature	/Kimberly Lovel/	Date Considered	04/19/2007
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language translation is attached.

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	F	A. Chao. Nonparametric estimation of the number of classes in a population. Scandinavian Journal of Statistical Theory and Applications 11(1984): 265—270.	
	G	S. Chaudhuri and V. Narasayya. An Efficient, Cost-Driven Index Selection Tool for Microsoft SQL Server. In Proc. 23rd VLDB, 1997.	
	H	S. Finkelstein, M. Schkolnick, and P. Tiberio. Physical Database Design for Relational Databases. ACM TODS, 13(1988): 91—128.	
	I	P.B. Gibbons, Y. Matias, and V. Poosala. Fast Incremental Maintenance of Approximate Histograms. In Proc. 23rd VLDB, pages 466—475, 1997.	
	J	L.A. Goodman. On the estimation of the number of classes in a population. Annals of Mathematical Statistics 20(1949): 572—579.	
	K	P.J. Haas, J.F. Naughton, S. Seshadri, and L. Stokes. Sampling-based estimation of the number of distinct values of an attribute. In Proc. 21st VLDB, pages 311—322, 1995.	
	L	P.J. Haas and A.N. Swami. Sequential Sampling Procedures for Query Size Estimation. In Proc. ACM SIGMOD Conference, pages 341—350, 1992.	
	M	W. Hou, C. Ozsoyoglu, and E. Dogdu. Error-Constrained COUNT Query Evaluation in Relational Databases. In Proc. ACM SIGMOD Conference, pages 278—287, 1991.	

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	N	W. Hou, C. Ozsoyoglu, and B. Taneja. Statistical estimators for relational algebra expressions. In Proc. 7th ACM Symposium on Principles of Database Systems, pages 276—287, 1988.	
	O	W. Hou, C. Ozsoyoglu, and B. Taneja. Processing aggregate relational queries with hard time constraints. In Proc. ACM SIGMOD Conference, pages 68-77, 1989.	
	P	Y. Ioannidis and V. Poosala. Balancing Histogram Optimality and Practicality for Query Result Size Estimation. In Proc. ACM SIGMOD Conference, pages 233—244, 1995.	
	Q	Y. Ioannidis and V. Poosala. Histogram-Based Solutions to Diverse Database Estimation Problems. IEEE Data Engineering Bulletin 18(1995): 10-18.	
	R	Y. Ling and W. Sun. An Evaluation of Sampling-Based Size Estimation Methods for Selections in Database Systems. In Proc. IEEE Conference on Data Engineering, pages 532—539, 1995.	
	S	R.J. Lipton and J.F. Naughton. Query Size Estimation by Adaptive Sampling. In Proc. ACM PODS, pages 40—46, 1990.	
	T	R.J. Lipton, J.F. Naughton, and D.A. Schneider. Practical Selectivity Estimation through Adaptive Sampling. In Proc. ACM SIGMOD Conference, pages 1—11, 1990.	
	U	R.J. Lipton, J.F. Naughton, D.A. Schneider, and S. Seshadri. Efficient Sampling Strategies for Relational Database Operations. Theoretical Computer Science 116(1993): 195—226.	

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	V	J.F. Naughton and S. Seshadri. On Estimating the Size of Projections. In Proc. Third International Conference on Database Theory, pages 499—513, 1990.	
	W	F. Olken. Random Sampling from Databases. PhD Thesis, Computer Science, U.C. Berkeley, 1993.	
	X	F. Olken and D. Rotem. Random Sampling from Databases — A Survey. Manuscript, 1994.	
	Y	C. Ozsoyoglu, K. Du, A. Tjahjana, W. Hou, and D.Y. Rowland. On estimating COUNT, SUM, and AVERAGE relational algebra queries. In Proc. Conference on Database and Expert Systems Applications, pages 406—412, 1991.	
	Z	V. Poosala, Y. Ioannidis, P. Haas, and E. Shekita. Improved Histograms for Selectivity Estimation of Range Predicates. In Proc. ACM SIGMOD Conference, pages 294—305, 1996.	
	AA	C. Piatetsky-Shapiro and C. Connell. Accurate estimation of the number of tuples satisfying a condition. In Proc. ACM SIGMOD Conference, pages 256—276, 1984.	
	BB	P.C. Selinger, D.D. Astrahan, R.A. Chamberlain, R.A. Lone, and T.G. Price. Access path selection in a relational database management system. In Proc. ACM SIGMOD Conference, pages 23—34, 1979.	

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